torn, so as to be unrecognizable. Whether a blade can be made to cut any thinner than that has not been tried; but it may be remarked that the first razor blade used gave out at $\frac{1}{24000}$ inch thick, and would not take an edge capable of cutting finer than that."

NOTES.

After twenty-seven years of unremitting toil for the advancement, the exaltation and free spread of science in this country, the land of his adoption, Louis Agassiz died, in the ripeness of his years, Dec. 14, aged sixty-six. It is not the time now to estimate Professor Agassiz's scientific attainments and compare him with his contemporaries, but to mourn the loss of one whose profound learning and genius for original research; whose organizing abilities, courageous adherence to the dictates of his conscience when matters of scientific faith were at stake; whose persuasive eloquence, rare personal magnetism, conspicuous enthusiasm, and untiring industry which, though it shortened his life, intensified its value, made him one of the remarkable men of the century.

A student and friend of Humboldt and Cuvier, and enjoying the instructions of Oken, Tiedemann and others, he certainly had wonderful advantages, and by his native genius and sturdy industry made the most of them, his reputation being more than European before he was thirty years of age. At the age of thirty-nine he came to this country, travelled extensively, and extended his glacial theory to include both hemispheres. Here he began to build up the Museum of Comparative Zoology, his singleness of purpose, rare personal qualities and disinterested zeal, winning him friends and means for carrying on that vast establishment. Meanwhile he travelled and lectured over the country; everywhere by his native unaffected eloquence winning men to a just appreciation of the objects and needs of science, and elevating and dignifying the pursuit of knowledge for its own sake. He was an admirable teacher, and introduced new methods of studying zoology. He gathered about him a number of young men, some of whom were associated with him in the preparation of the material for his great work, "Contributions to the Natural History of the United States;" and so powerful was his influence over his students that he may be said to have founded a school in natural history, based on the spirit of Cuvier, who moulded Agassiz himself in his student days.

Then came his Brazilian journey, with the immense zoological treasures accruing. Hardly resting from this exploration he organized the Hassler Expedition around the continent of South America, under the auspices of the Coast Survey, and recuperated his shattered health on that long voyage. Finally, he established, with the aid of its liberal founder, the Anderson School of Natural History, and it was there in his disinterested labors in behalf of improved methods of teaching in our higher and normal schools that he undoubtedly overworked himself and lost the strength to resist the strain of duties and cares that multiplied during the succeeding autumn.

He died literally in the harness; full of plans for the development of his great museum, for the enlargement and full success of the Anderson School at Penekese Island, meanwhile doing original work at the museum, writing a course of articles for the "Atlantic Monthly," and preparing some papers for this journal; all this, while performing his college duties in the lecture rooms and laboratories of the museum, with a course of popular lectures at Washington on his hands, and meanwhile not unmindful of the calls of social life.

Professor Agassiz was perhaps the most widely known and popular man in the United States. In his death it may be said that science has lost one of its most gifted followers, and humanity, in his long devotion to all that tends to elevate the race, one of its best types.

It will be seen by the following letter, dated San Francisco, Cal., Dec. 2, 1873, from Mr. W. H. Dall, that the explorations of which he has charge have been quite successful:—

"We have had a very successful season, though the spring was a very late one, and have accomplished more than I dared to hope at first. Our work lay in the islands between Attu and the Shumagins. We have visited nearly every point of interest in the Aleutian chain, including Attu, Kyska, Amchitka, Adakh, Atka, Four Craters, Bogosloff, Unalashka and the Shumagins, correcting the astronomical positions, variation of the compass, general hydrography, etc. We surveyed a harbor for the landing of one end of the Japan cable—if they take it that way—on the island of Kyska. We made some interesting soundings in Behring Sea, showing great depths of water in the western part of it, with a bottom of Globigerina ooze, our deepest cast giving about 1200 fathoms without bottom. We disproved the existence of the cel-

ebrated Bogosloff reef, finding 800 fathoms without bottom where it is laid down on the chart. We found the magnetic variation to be less easterly than when the last observations were taken. During our leisure natural history was not neglected, and we now have a magnificent geographical collection, especially in marine invertebrates. In birds, too, we did very well, and especially in prehistoric relics. We found no Asiatic influence in the western islands but a more predominating Arctic type of fauna and flora as we went west. We got several hundred wood carvings from caves, about three hundred bone and stone implements and thirty-six prehistoric crania and some later ones.

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